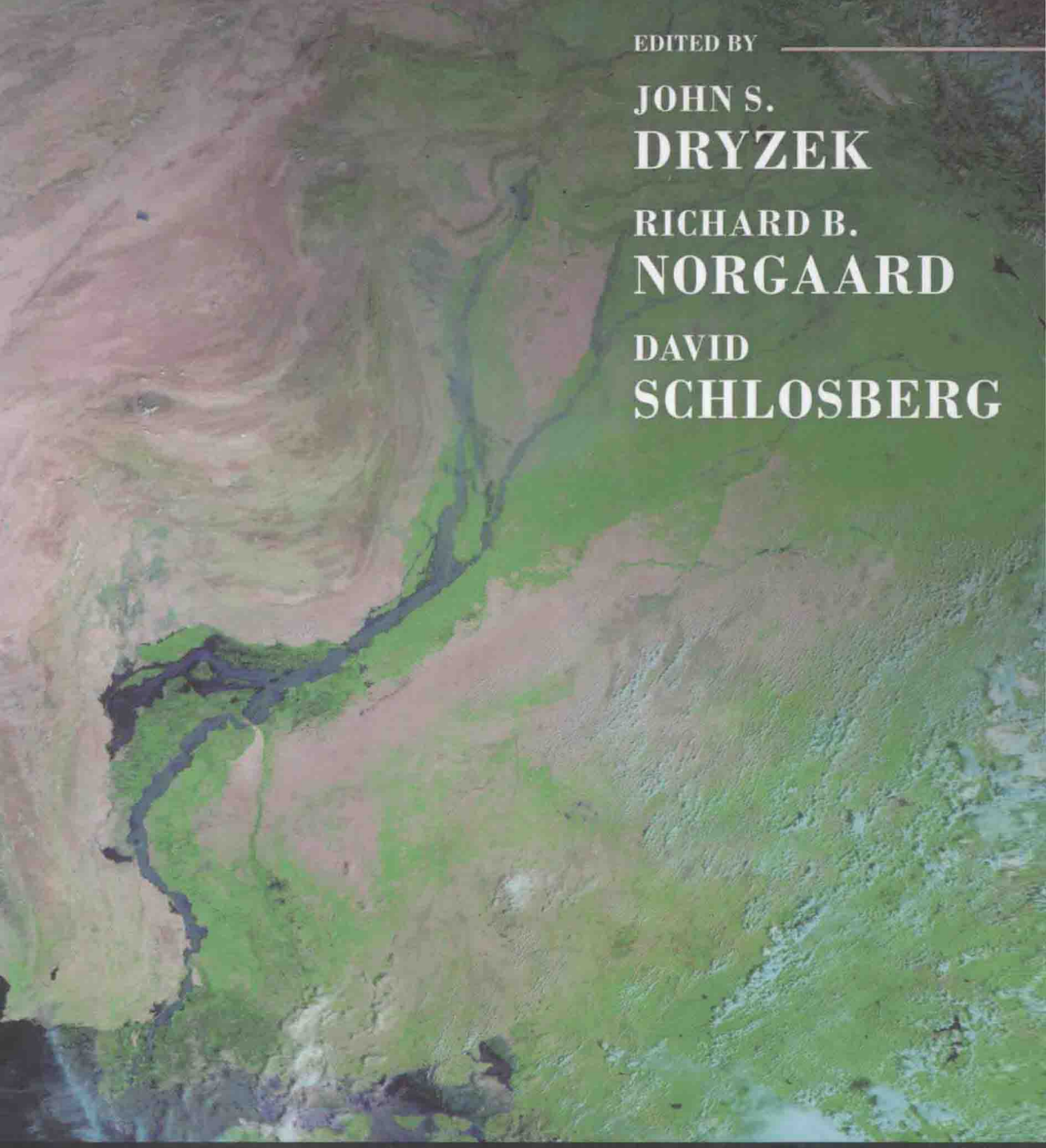

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The Oxford Handbook *of* CLIMATE CHANGE AND SOCIETY

OXFORD HANDBOOK OF

CLIMATE CHANGE AND SOCIETY

Edited by

JOHN S. DRYZEK,
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AND DAVID SCHLOSBERG

OXFORD
UNIVERSITY PRESS

OXFORD
UNIVERSITY PRESS
Great Clarendon Street, Oxford OX2 6DP

Oxford University Press is a department of the University of Oxford.
It furthers the University's objective of excellence in research, scholarship,
and education by publishing worldwide in

Oxford New York

Auckland Cape Town Dar es Salaam Hong Kong Karachi
Kuala Lumpur Madrid Melbourne Mexico City Nairobi
New Delhi Shanghai Taipei Toronto

With offices in

Argentina Austria Brazil Chile Czech Republic France Greece
Guatemala Hungary Italy Japan Poland Portugal Singapore
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Published in the United States
by Oxford University Press Inc., New York

First published 2011

British Library Cataloguing in Publication Data
Data available

Library of Congress Cataloging in Publication Data
Data available

Typeset by SPI Publisher Services, Pondicherry, India
Printed and bound by
CPI Group (UK) Ltd,
Croydon, CR0 4YY

ISBN 978-0-19-956660-0

3 5 7 9 10 8 6 4 2

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Acknowledgements

The editors wish to thank all of the authors of this Handbook not only for their efforts in producing their chapters, but also for their attempts to make their approaches and arguments accessible to those in other fields, and to a broader audience. More generally, we want to express our appreciation for all of those who have taken on the issue of climate change in their disciplines, and brought a full array of approaches, frames, discourses, and tools to bear in helping us understand—and begin to respond to—the many crucial relationships between climate change and society. We received helpful suggestions and comments from an audience at a symposium at the University of Copenhagen in December 2009, thanks to Kasper Møller Hansen for making that possible. Thanks also to Richard Howarth, Daniel Bromley, Hayley Stevenson, and several anonymous reviewers for advice; and to Jeff Joyce for help with the cover image.

Our editor at Oxford University Press, Dominic Byatt, supported the idea of this Handbook from the very beginning, and helped with every step of the way thereafter. Also at OUP, Lizzy Suffling and Sarah Parker were exemplary in their attention to detail.

Finally, we must acknowledge the recent loss of one of the best exemplars of interdisciplinary understanding, public communication, and broad passion on the issue of climate change, Professor Stephen Schneider. His wide array of talents are needed now more than ever, and while he is already sorely missed, the best tribute to his work will be the expanded efforts of others dedicated to seeing his mission through.

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PART I

INTRODUCTION

CHAPTER 1

CLIMATE CHANGE AND SOCIETY: APPROACHES AND RESPONSES

JOHN S. DRYZEK, RICHARD B. NORGAARD, AND DAVID SCHLOSBERG

CLIMATE change presents perhaps the most profound challenge ever to have confronted human social, political, and economic systems. The stakes are massive, the risks and uncertainties severe, the economics controversial, the science besieged, the politics bitter and complicated, the psychology puzzling, the impacts devastating, the interactions with other environmental and non-environmental issues running in many directions. The social problem-solving mechanisms we currently possess were not designed, and have not evolved, to cope with anything like an interlinked set of problems of this severity, scale, and complexity. There are no precedents. So far, we have failed to address the challenge adequately. Problems will continue to manifest themselves—both as we try to prevent and as we try to adapt to the consequences of climate change—so human systems will have to learn how better to respond. One of the central social, political, and economic questions of the century is: how then do we act?

In this Handbook we have brought together a representation of the best scholars on climate change and society. We identified the key approaches and selected authors to represent and engage with their literatures in a manner that would be informative and interesting to scholars in other areas and to newcomers as well. We have encouraged authors to make linkages between approaches and to other chapters. We hope the Handbook will contribute to the integration of understanding needed to tackle so systemic and complex a problem as the relationship between climate change and society. At the same time, the Handbook is by no means a synthesis, nor does it provide a unified diagnosis of what is wrong (and right) with contemporary human systems, an integrated and coherent program for research, or a singular blueprint for collective action. While we have views of our own on such questions, some of which will come through in this introductory chapter, there is no unified line followed by our authors as they address the complex relationship between people, societies, and the natural world. Most (not all) agree on the magnitude and

severity of the problems. But there are substantial differences when it comes to identifying what matters, what is wrong, what is right, how it got to be that way, who is responsible, and, not least, what should be done.

Commissioning, reading, and editing these contributions has left us acutely aware of the limitations of human knowledge—and the major constraints on intelligent human action—when it comes to complex social-ecological systems. Climate change is, as Steffen explains in his opening chapter, a truly diabolical problem. It is additionally devilish in the mismatch between human capacities to act and the scale, scope, and immediacy of collective action seemingly demanded. Nevertheless we have to start somewhere, and we have aspired in this Handbook to commission and compile the best available set of intellectual resources for the multiple tasks ahead. Given the complexity of what we face, no single volume can offer commentary on absolutely everything that is needed. Yet we have aspired to a measure of comprehensiveness in addressing the range of ways climate change plays out in the social realm.

Our main task is, then, to lay out the various ways that climate change affects society, and what society might do in response. The authors represent a variety of disciplinary understandings and intellectual frameworks that can be brought to bear. In this chapter we introduce the key topics, themes, layers, and issues, before concluding with a discussion of our chosen structure. We begin with the science that first identified climate change as a problem, and how it is received by and in society and government.

1 Science and Society

While the effects of climate change—floods, drought, heat stress, species loss, and ecological change—can be experienced very directly, their conceptualization as connected phenomena with common causes is due to climate science, which therefore plays a very basic part when it comes to climate change and society. Natural scientists (such as Steffen in his chapter) tell us that there is now consensus in the climate science community about the reality of climate change, and near consensus on its severity and the broad range of attendant harms and risks. But that consensus does not of course mean the science is then accepted as the basis for policy. Climate science does not provide certain future projections of risks and damages. The projections are entangled in assumptions about how human systems respond over time—as well as natural ones. Climate is an outcome of a complex geo-atmospheric-ecological system, and complex systems always have a capacity to surprise by behaving in unanticipated ways. Climate change, furthermore, is only one of a range of interacting phenomena of global environmental change caused or affected by human activity. We may indeed be entering the unknown territory of an 'anthropocene' era where people drive truly major changes in global systems. Thus while the broad sweep of history shows climate change being taken ever more seriously as an issue within the scientific community and eventually far beyond (see Weart's chapter), we are dealing with complex processes with uncertain outcomes rather than simple facts, and the public and politicians have difficulty seeing the drivers to collective action in any simple way. The agendas of climate science are now affected by larger social and political processes (see the